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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/848,770	05/03/2001	Michael T. Loos	26625-704	6636

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EXAMINER

RUTTEN, JAMES D

ART UNIT	PAPER NUMBER
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2192

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/848,770

Applicant(s)

LOOS ET AL.

Examiner

J. Derek Rutten

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 January 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/29/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Acknowledgement is made of Applicant's amendment dated 13 January 2005, responding to the 13 July 2004 Office action provided in the rejection of claims 1-26, wherein claims 10, 11, and 24 have been amended, and no claims have been canceled or added. Claims 1-26 remain pending in the application and have been fully considered by the examiner.

2. Applicant has primarily argued that the claims are not anticipated by the Wright patent because it does not disclose a mobile data model. This argument is not persuasive, as will be addressed under the *Response to Arguments* section below.

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Terminal Disclaimer

4. The terminal disclaimers filed on 13 January 2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of any patent granted on Application Numbers 09/848,769, 09/848952, or 09/848,970 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Response to Arguments

5. In response to applicant's argument in paragraph 2 of page 9 that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a mobile data model that is distinguishable from a programmatic model such that a mobile data model is decoupled from a particular client interface or enterprise data source, and a mobile data model capable of independently describing key details required by a mobile application) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

6. Currently amended claims 11 and 24 recite the feature of a decoupled mobile data model. In the second paragraph on page 9, applicant argues that Wright does not teach a mobile data model that is decoupled from a particular client interface or enterprise data source. However, Wright discloses the use of a data model that allows a database to exist in several forms. The primary database exists on the server, but a temporary representation exists that handles occasions when a connection to the primary database is unavailable (column 5 line 60 – column

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6 line 8). An API is provided that allows a server to access multiple previously existing data sources (column 6 lines 10-13: "To allow the FL server 132 access to any data source a developer may already be working with, an API is provided between those existing data sources, e.g., 180, 182, and the FL server 132."). Thus, the data model is decoupled from the enterprise data source. Also, Wright's "service object" separates the data model from a particular client interface by handling communications transport, multi user, and concurrency issues. See column 3 lines 49-53: "The service object allows the developers to write the application as if it were communicating with a single client, allowing them to focus on the application itself, rather than focus on communications transport, multi user, and concurrency issues." Thus, the service object decouples the data model from a particular client interface by handling all communications transport, multi user and concurrency issues.

Drawings

7. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "decoupled mobile data model" (claim 11) and the "mobile data model decoupled from a particular client interface and enterprise data source" (claim 24) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing

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sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-26 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,857,201 to Wright et al. (hereinafter referred to as “Wright”).

As per claim 1, Wright discloses:

A method for use of a software application (column 13 line 1 – column 14 line 15), the method comprising:

*accessing a mobile data model, at least a portion of the mobile data model suitable to be instantiated at a distributed device to create a mobile data store containing enterprise information on the distributed device (column 2 lines 24-26: “The client/server (C/S) architecture of the present invention is designed to allow the client to become a **direct extension of the corporate data sources**.”; also column 2 lines 50-58: “...in a computer network, including a server, a data source, and a mobile client having a database, a method of synchronizing the client database and data source during a non-persistent connection, the method comprising the steps of connecting the mobile client to the server; manipulating the **client database** by the server; updating the **data source** responsive to the manipulation by the server; and disconnecting the client from the server.”);*

*creating a mobile software application to be executed at the distributed device and to interact with the mobile data store (column 2 lines 34-38: “Applications built with existing development tools can be enabled to either **exchange data** on demand, or provide facilities for a multi-port server allowing remote database access and e-mail access from the field.”); and*

making the mobile software application and at least a portion of the mobile data model available to a consumer (In Wright, a consumer can be considered a PDA, which functions as the client in the client/server architecture disclosed. As such, the application and data model are inherent to the function of the system, since without availability to them, the system loses its primary functionality.).

As per claim 2, the above rejection of claim 1 is incorporated. Wright further discloses: *wherein the consumer comprises a distributed computing device* (column 2 lines 38-42).

As per claim 3, the above rejection of claim 1 is incorporated. Wright further discloses: *initiating deployment of the mobile software application and the at least a portion of the mobile data model to a plurality of distributed computing devices* (column 2 lines 32-34).

As per claim 4, the above rejection of claim 1 is incorporated. Wright further discloses: *using the mobile data model to create a domain data store in a middle tier server* (column 2 lines 56-57).

As per claim 5, the above rejection of claim 1 is incorporated. Wright further discloses: *wherein a first consumer receiving the mobile software application can access*

and update data instances in the domain data store using the at least a portion of the mobile data model (column 4 lines 38-49).

As per claim 6, the above rejection of claim 1 is incorporated. Wright further discloses: *wirelessly deploying the mobile software application to a first consumer* (column 5 lines 40-41; also column 4 lines 2-4; also column 11 lines 16-17).

As per claim 7, the above rejection of claim 1 is incorporated. Wright further discloses: *developing a distribution rule that identifies a group of consumers; and initiating deployment of the mobile software application to the group of consumers* (column 11 lines 10-17).

As per claim 8, the above rejection of claim 1 is incorporated. All further limitations have been addressed in the above rejections of claims 3, 4, and 5.

As per claim 9, the above rejection of claim 1 is incorporated. All further limitations have been addressed in the above rejections of claims 2, 3, and 6.

As per claim 10, the above rejection of claim 9 is incorporated. Wright further discloses: *wherein the first consumer comprises a group of mobile workers sharing a job description* (column 4 lines 17-21).

As per claim 11, Wright discloses:

A system for application development in a mobile domain (Figure 2), comprising:

*a middle tier server; a domain data store maintained in the middle tier server, the domain data store representing enterprise information maintained in an enterprise back end (column 6 lines 27-33: "The FormLogic Server 132 serves as a "gateway" between FormLogic Clients (e.g., 136, 142, 146) and **enterprise data sources** (e.g., 180, 182). The server 132 supports what is known as a multi-tier client/server model in that it creates an **intermediate server** between the client and the "traditional" or "original" server."; also column 7 lines 45-64: "A service defines the relationship between a client application and an enterprise data source. Examples of services include Mail, World Wide Web Gateway, or Inventory... The **service instantiations** can be considered as **interfaces** between the "master" service and the connection."*

Comment: Here, the service instantiations represent enterprise information maintained in an enterprise back end, and as such can be interpreted as domain data stores within the middle tier server.);

*a decoupled mobile data model, a portion of the decoupled data model suitable to be instantiated at a distributed computing platform (See column 6 lines 10-13: "To allow the FL server 132 **access to any data source** a developer may already be working with, an API is provided*

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between those existing data sources, e.g., 180, 182, and the FL server 132.” The API provides decoupling of the data model from the enterprise data source; also see column 5 lines 49-52: “The FL Engine 160 incorporates a full local database implementation that allows data to be manipulated and collected by the FL client while not connected to the FL server 132”)

an application development engine operable to generate instructions that can be deployed to the distributed computing platform and that allow the distributed computing platform to access information within the mobile data store (column 4 lines 2-4:

“Complete Software Distribution interface allowing developers to programmatically install FormLogic forms, agents and tables during connections”; also column 4 lines 41-43:

“This allows portions of databases to be carried into the field where they can be modified and later **synchronized** with the server database.”; also column 5 lines 16-17: “The FL client 136 includes an FL **Engine** 160 which allows FormLogic applications to execute on a variety of handheld devices”).

All further limitations have been addressed in the above rejection of claim 1.

As per claim 12, the above rejection of claim 11 is incorporated. Wright further discloses: *wherein the application development engine is operable to generate object*

oriented instructions (column 5 lines 33-36, referencing U.S. Pat. 5,704,029 [incorrectly listed as 5,204,029], shows inherent use of the Newton Script object-oriented language.).

As per claim 13, the above rejection of claim 11 is incorporated. Wright further discloses: *further comprising a graphical user interface (GUI) engine responsive to the application development engine* (column 5 lines 30-33).

As per claim 14, the above rejection of claim 11 is incorporated. Wright further discloses: *a mobile data modeler operable to access the mobile data model* (column 5 lines 33-36: “script engine”); *and*

a graphical user interface (GUI) engine operable to present a developer with an interface for the mobile data modeler to modify the mobile data model (column 5 lines 33-36: “user interface”).

As per claim 15, the above rejection of claim 11 is incorporated. Wright further discloses: *further comprising an enterprise back end system maintaining the enterprise information* (column 4 lines 65-67).

As per claim 16, the above rejection of claim 11 is incorporated. All further limitations have been addressed in the above rejection of claim 6.

As per claim 17, Wright discloses: *a memory associated with the distributed computing platform, the memory storing a mobile data store comprising information indicative of information in an enterprise backend* (column 5 lines 18-20: The Apple MessagePad Model 120 inherently comprises memory). All further limitations have been addressed in the above rejections of claims 1 and 11.

As per claim 18, the above rejection of claim 17 is incorporated. All further limitations have been addressed in the above rejection of claim 1.

As per claim 19, the above rejection of claim 18 is incorporated. Wright further discloses: *wherein the mobile application comprises user task specific routines* (column 6 lines 46-59).

As per claim 20, the above rejection of claim 18 is incorporated. Wright further discloses: *wherein the mobile application comprises user specific routines* (column 7 lines 45-53).

As per claim 21, the above rejection of claim 20 is incorporated. Wright further discloses: *wherein the user specific routines are specific to a first user of the distributed computing platform, the system further comprising: a second mobile application that comprises a second set of specific routines for a second user of the distributed computing platform* (column 10 line 66 – column 12 line 19).

As per claim 22, Wright discloses: *establishing a first communication link with a mobile computing device; disconnecting the first communication link; establishing a second communication link with the mobile computing device; and receiving transaction data across the second communication link, the transaction data resulting from execution of the client-side application by the mobile computing device at least a portion of the execution occurring after disconnecting the first communication link and before establishing the second communication link* (column 5 lines 52-58: “Upon connection, this local database 172 is automatically manipulated by the FL server 132. The FL server 132 can query the client database 172, add data to the client database, or remove data from the client database in order **make updates** to both the client and server databases to reflect **changes** that have happened on both sides **since the last connection.**”). All further limitations have been addressed in the above rejection of claim 1.

As per claim 23, the above rejection of claim 22 is incorporated. Wright further discloses: *deriving a first mobile data model from an enterprise information system; and modifying the first mobile data model to yield the deployable mobile data model* (column 4 lines 38-43).

As per claim 24, Wright discloses:

A method for application development and deployment (column 6 lines 34-38:

"The FL Builder (not shown) is a development tool, previously described in applicant's copending patent application, now U.S. Pat. No. 5,704,029, used to build FormLogic applications that can be executed on a variety of hardware platforms."), *the method comprising:*

developing a mobile data mode, the mobile data model decoupled from a particular client interface and enterprise data source; See column 3 lines 44-53: "The FormLogic service object allows developers to link PDA client applications for an unlimited number of user connections over a variety of transports without the need to worry about multi-user and concurrency issues. The service object allows the developers to write the application as if it were communicating with a single client, allowing them to focus on the application itself, rather than focus on communications transport, multi user, and concurrency issues." Thus, the service object decouples the data model from a particular client interface, since the client interface comprises a variety of transports; also see column 6 lines 10-13: "To allow the FL server 132 **access to any data source** a developer may already be working with, an API is provided between those existing

data sources, e.g., 180, 182, and the FL server 132.” The API provides decoupling of the data model from the enterprise data source)

adding at least a portion of the mobile data model to a package (Developing a mobile data model is inherent to adding it to a package, otherwise there would be nothing to add; column 6 lines 63-64: “Communications agents, also just known as **"agents"**, are developed to describe the communications **"session"**. Communications agents know how to connect to a particular host, perform a **set of operations** or tasks, which usually includes **synchronizing the host data source**, e.g., 180, with the client database 172, and then disconnecting. The idea is that a developer can create a communications agent that represents each of the communications sessions that a field user may need.” Here, the mobile data model is evidenced by the set of operations that make up an agent. An agent here is considered to be equivalent to a package. In order for the agent to operate on the host data source, it must inherently use a data model, otherwise it would not be able to find or distinguish the data contained therein.);

including the package in a mobile user application (column 7 lines 21-23: “An exemplary Session1 200 called Daily Connect includes three tasks: Task1 204, e.g., GetMail; Task2 206, e.g., SendMail; and Task3 208, e.g., UpdateInventory.”); and

deploying the mobile user application to a distributed computing device (column 4 lines 2-4 as cited above in the rejection of claim 11).

As per claim 25, the above rejection of claim 24 is incorporated. Wright further discloses: *including at least an integration portion of the mobile data model in an application comprising an integration component* (column 6 lines 49-56; An integration component is inherent to the “retrieve work order” session described in this passage. Without an integration component, a new work order would not be able to be examined.).

As per claim 26, the above rejection of claim 24 is incorporated. Wright further discloses: *wherein the mobile user application is operable to colonize the distributed computing device and initiate the instantiation of a data store on the distributed computing device, the instantiation described by the at least a portion of the mobile data model added to the package* (column 4 lines 38-43).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 6,766,326 to Cena discloses a decoupled mobile data model (Abstract).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Derek Rutten whose telephone number is (571) 272-3703. The examiner can normally be reached on T-F 6:00 - 4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jdr

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5/31/05